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Title: Video ethogram of Tursiops truncatus feeding behaviors associated with shrimp

nets

Category: Behavior

**Student**: Not Applicable

**Preferred Format**: Oral Presentation

Abstract: Although bottlenose dolphins, Tursiops truncatus, have been observed behind trawling shrimp boats, viewing conditions have precluded the description of specific feeding behaviors. Video of T. truncatus feeding behaviors associated with trawling shrimp boats were obtained from eight years of monitoring experimental Turtle Excluder Devices (TEDs) and Bycatch Reduction Devices (BRDs). Real-time underwater video and audio signals were monitored and recorded on high quality digital decks for documentation and analysis Seven distinct feeding behaviors were identified. Dolphins were observed: 1) picking individual Atlantic thread herring out of the mesh of a TED extension, 2) picking fish from the bag, 3) manipulating the throat of the net to bounce mackerel toward the TED exit hole, 4) feeding on fish escaping from BRDs, 5) lifting the TED flap to release fish within range of capture, 6) entering the TED flap in order to feed on fish schooling within the TED extension, and 7) selectively feeding on bycatch thrown overboard after a trawl. In 360 hours of observations from the Gulf of Mexico and 220 hours of observations from the Northwest Atlantic, dolphins were never observed tearing nets while removing or attempting to remove a fish. Although, dolphins were observed feeding on 20 species they exerted more effort in pursuing and capturing Spanish mackerel, juvenile king mackerel, weakfish, silver seatrout, Atlantic menhaden, Atlantic thread herring, ribbonfish (cutlassfish or silver eel), juvenile red snapper (Gulf of Mexico) and goatfish (Gulf of Mexico) when they were present. Atlantic croaker, spot, southern kingfish, bluefish, squid, harvestfish, butterfish, star drum, banded drum, silver perch and southern flounder were eaten when preferred prey species were unavailable. We also observed dolphins rubbing on the lazy line and surfing a towed net.